

LOCAL SOURCE WATER PROTECTION GRANT PROGRAM

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Program Planner

Drinking Water and Groundwater Bureau

NHDES

History of Program

- Initiated in 1997
- Federally funded
 - ▣ Safe Drinking Water Act
- Goals:
 - ▣ Increase # of public water supply sources with some form of protection
 - ▣ Increase level of protection for already protected sources

Funding

- State Revolving Loan Fund
 - ~\$100,000-200,000 annually
 - Up to \$20,000 per project
- Since 1997
 - \$3,311,615
 - 261 projects
- 2016 grant round
 - \$176,670
 - 11 projects

Upcoming Grant Cycle

- Applications available by June 2016
- Deadline November 1, 2016
- Selected applicants notified January/February 2017
- Grant agreement approval by Governor & Council by April/May 2017

Who Can Apply?

- ❑ Water Suppliers
- ❑ Regional Planning Commissions
- ❑ Municipalities
- ❑ Non-profit Organizations
- ❑ State Agencies
- ❑ County Conservation Districts
- ❑ Watershed Associations
- ❑ Educational Institutions

Eligible Projects

- Develop & implement programs to protect existing public drinking water sources
 1. Delineation
 2. Assessment
 3. Planning
 4. Implementation
 5. Security

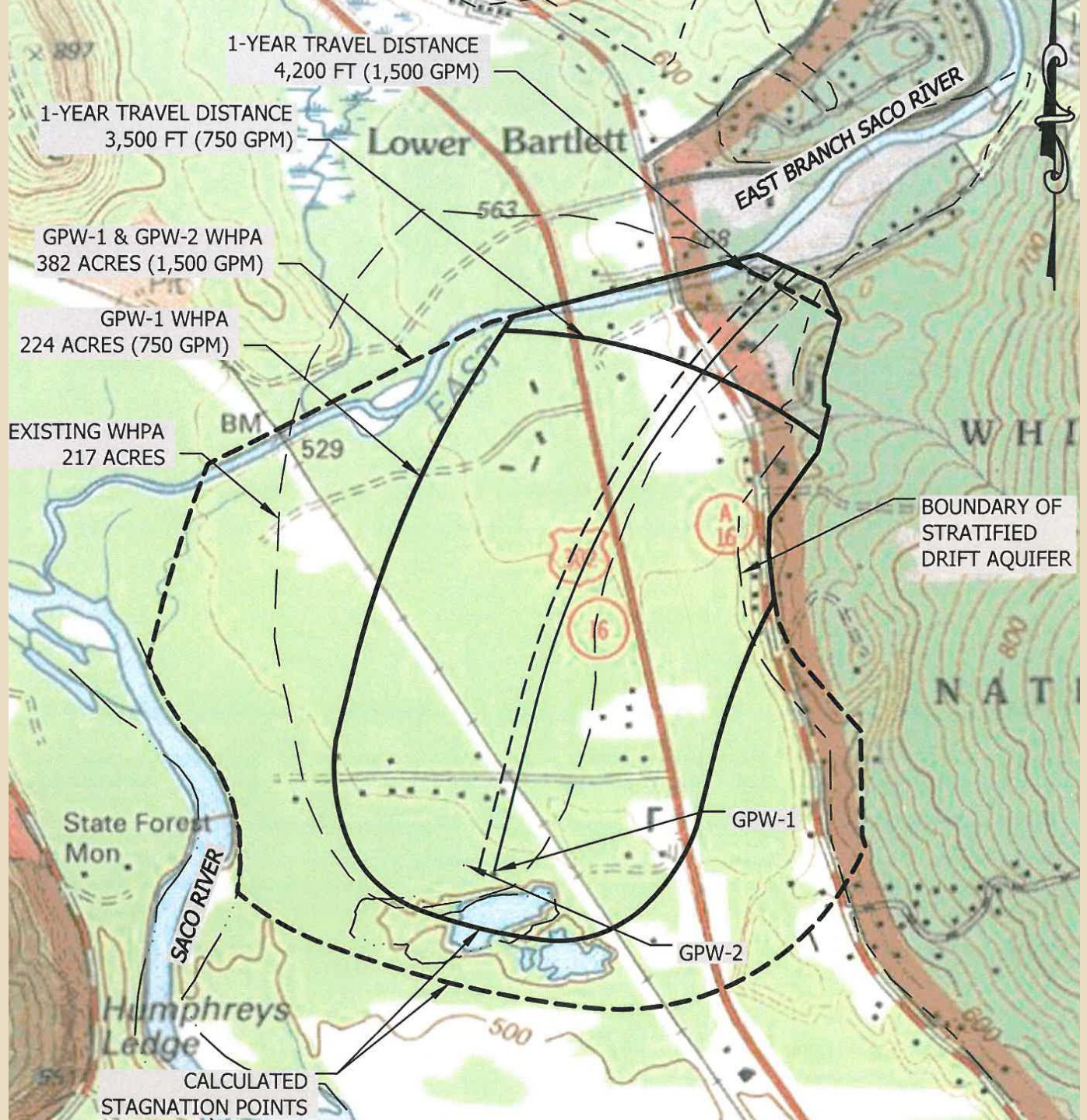
1. Delineation Projects

- Refine source water protection area (SWPA) delineations using site-specific info
- Delineate more sensitive portions of SWPAs
 - ▣ Time-of-travel zones
 - ▣ Sensitive sub-watersheds
 - ▣ Buffer areas
- Refine existing aquifer mapping

Example Delineation Project

- Lower Bartlett Water Precinct, 2010
 - ▣ Hired Horizons Engineering to delineate the wellhead protection areas (WPA) of its 2 wells
 - ▣ Also updated the inventory of Potential Contamination Sources within the WPA
 - ▣ Developed a wellhead Protection Program

Wellhead Protection Areas



2. Assessment Projects

□ Inventory:

- ▣ Expanding inventory of land uses
- ▣ Expanding inventory of potential contamination sources
- ▣ Establishing water quality monitoring program
- ▣ Inventorying relevant local protection ordinances

□ Evaluation:

- ▣ Prioritizing potential threats to water quality
- ▣ Evaluating existing protection measures

Example Assessment projects

- Manchester Water Works developed a database and user guide to store data from Lake Massabesic watershed to use for planning and monitoring
- Granite State Rural Water improved inventory of Aboveground Storage Tanks with hazardous chemicals in Pennichuck Water Works hydrologic area of concern

Example Assessment projects

- 2013 Plymouth Village Water & Sewer Dist.
 - Hired Emery & Garrett to do Sodium & Chloride Study
 - Inventoried WHPAs for sources of sodium & chloride
 - Developed mitigation plan with specific action steps to reduce sodium & chloride loading

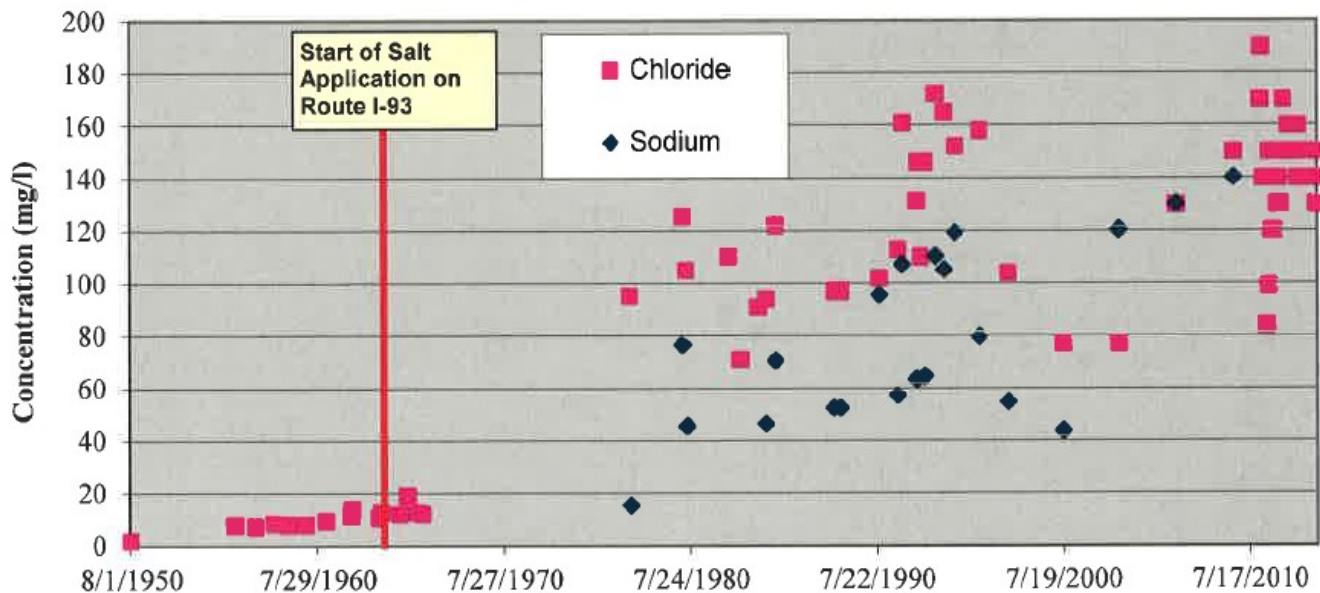
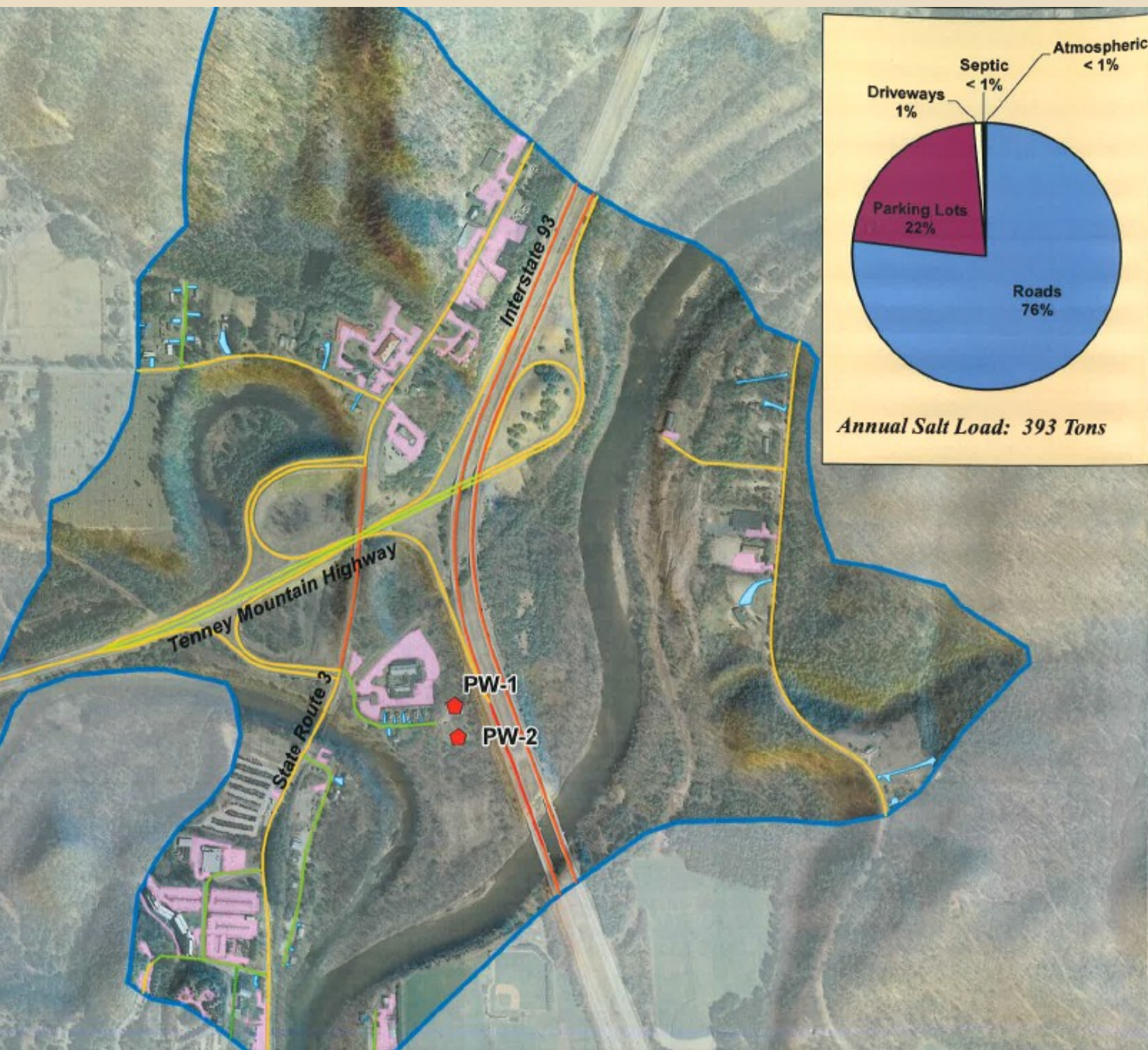
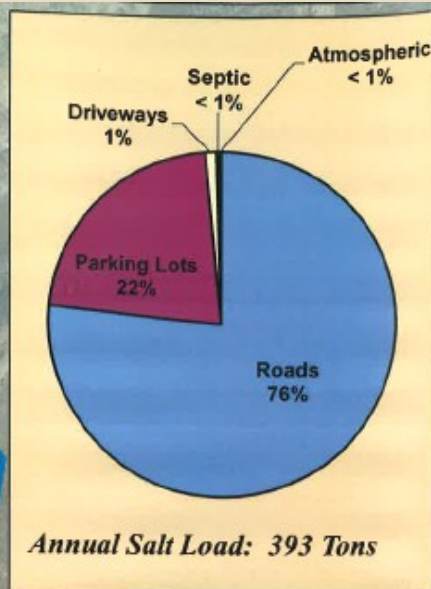


FIGURE 4

Annual Salt Loading in the
Wellhead Protection Area
Production Wells PW-1 and PW-2
Plymouth Village Water & Sewer
Plymouth, New Hampshire



Legend

- Existing Production Well
- Wellhead Protection Area
- Annual Road Salt Application (tons per mile)
 - 0 - 5
 - 5 - 10
 - 10 - 25
 - 25 - 50
 - 50 - 75
 - 75 - 100
- Paved Driveways
- Paved Parking Lots



Scale is 1:7,200
1 inch = 600 feet

3. Planning Projects

- Identify appropriate protection measures:
 - Educational programs
 - Programs for implementing BMPs
 - Local land use regulations
 - Groundwater reclassification
 - Adoption of source water protection rules
 - Land acquisition planning

Example Planning Projects

- Strafford Regional Planning Commission worked with Rochester to revise Aquifer Protection Ordinance

Example Planning Projects



- Pennichuck Water Works developed educational videos about stormwater pollution

Example Planning Projects

- Develop watershed management plan
- Develop wellhead protection plan

4. Implementation Projects

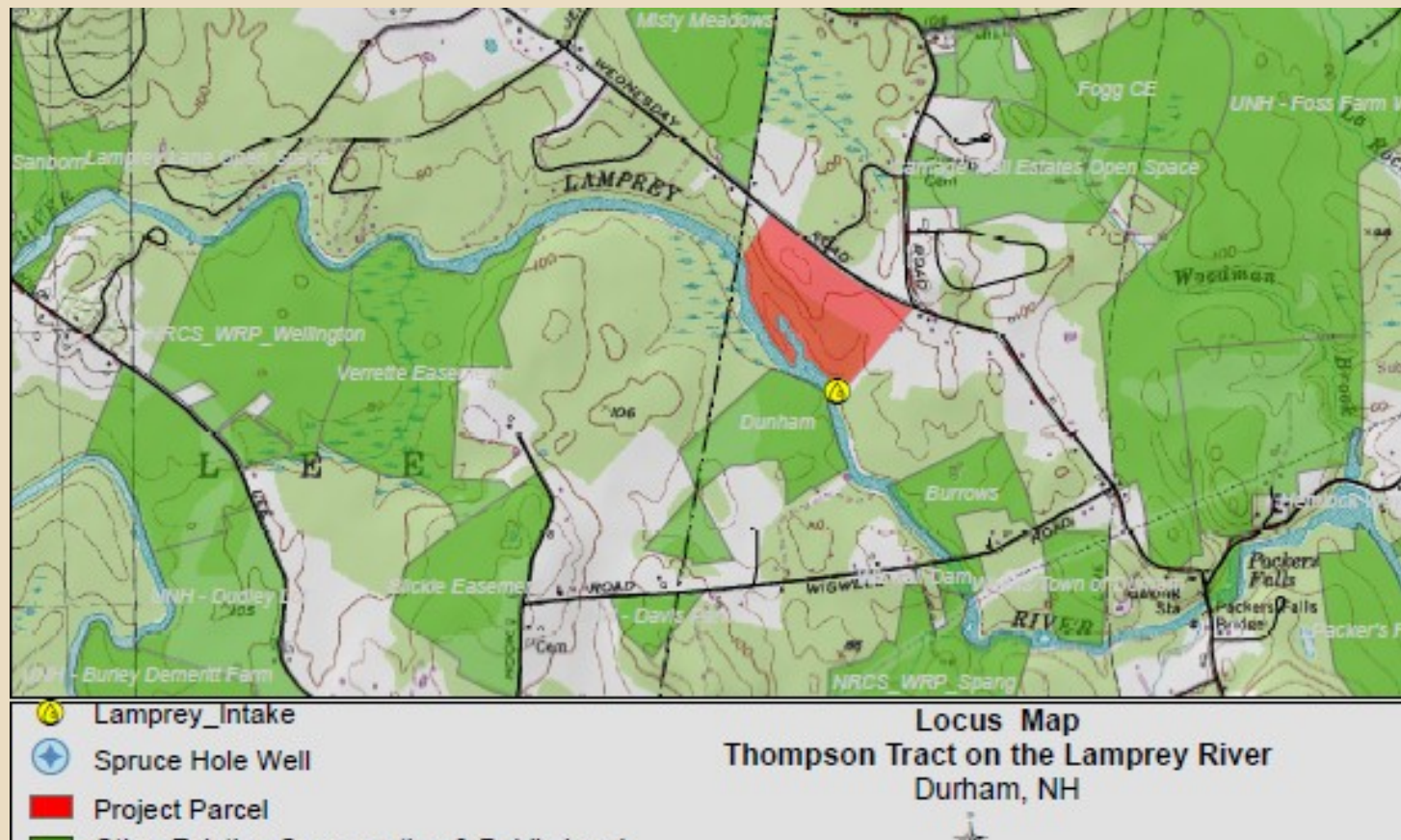
- Implement protection and security measures in SWPAs
 - ▣ Any measures listed under “Planning Projects” **except** land acquisition
 - ex. land purchase or easement
 - ▣ Land transaction costs associated with permanent protection of SWPA lands

4. Implementation Projects

- Implement protection and security measures in SWPAs
 - ▣ Source sustainability and water conservation
 - Preserving groundwater recharge
 - Community-based social marketing
 - Customer audits
 - Low-flow fixtures
 - **Not** projects eligible under Drinking Water State Revolving Fund
 - ex. “system-wide” conservation (e.g., leak detection, system audits, metering)

Example Implementation projects

- Southeast Land Trust—transaction costs for Thompson acquisition



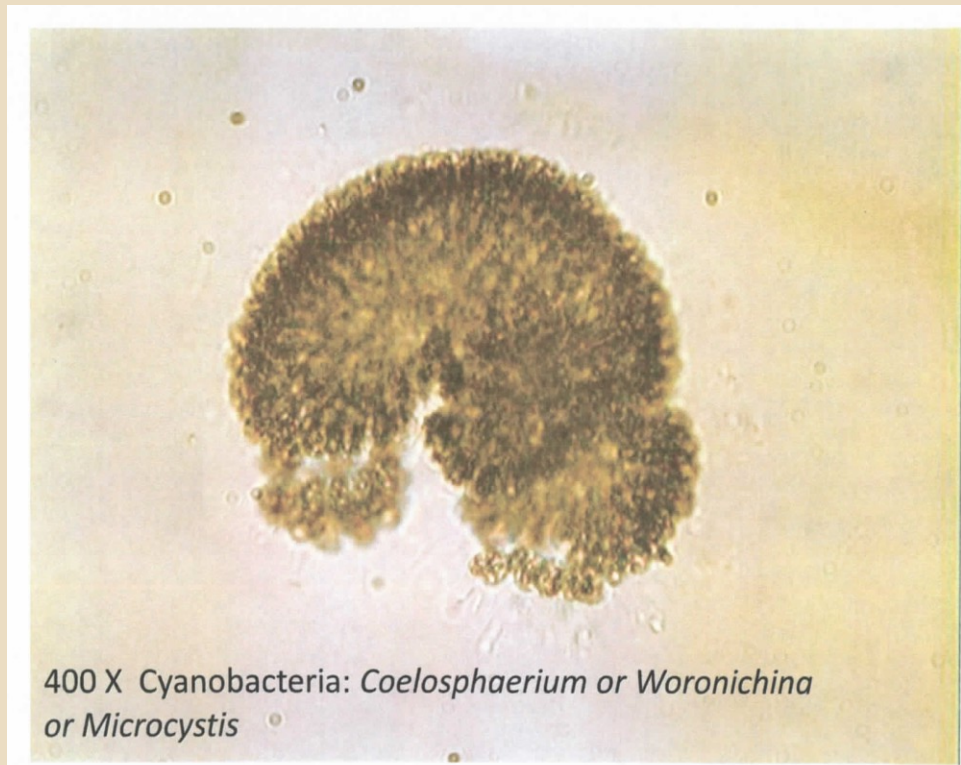
Example Implementation project

- Monadnock Tenants Cooperative
 - ▣ Removed 2 aboveground heating oil storage tanks ~240 feet away from wells
 - ▣ Installed 2 Roth style aboveground storage tanks



Example Implementation projects

- Lebanon purchased Cyanobacteria monitoring equipment and paid for first year of sampling



5. Security Projects

- Fencing around wells or intakes
- Fencing can include other buildings as well
 - ▣ Source **must** be included in fenced-in area
- Gates for well and intake access roads
- Access control for protected areas
- Alarms, signs, cameras, locks, and lights

Example Security project

- Town of Marlborough security fence around well



Eligibility Criteria

- ❑ Project grant funds cannot exceed \$20,000
- ❑ Address active or planned sources of drinking water
- ❑ Planning projects = show path to implementation
 - ❑ Signed letters of commitment
- ❑ Delineation and Assessment projects should also show they are likely to lead to implementation of source water protection
- ❑ QAPP required for collection, analysis, or manipulation of environmental data (e.g., water quality data)

Eligibility Criteria

- Applicants other than water suppliers must obtain support from the water supplier
- Address component of source protection project
- Not for activities required under DES rules and regulations
 - ▣ ex. inventorying potential contamination sources as required under new well siting rules, Env-Dw 301

Scoring

- Review team evaluates and ranks applications
- Scoring sheet
 - ▣ # of active public water supply sources protected
 - ▣ Plans for implementation of source water protection
 - Important for assessment, delineation and planning projects
 - ▣ Component of source protection project
 - ▣ Address existing or future contamination sources
 - ▣ Address contamination sources close to well/intake
 - ▣ Quality of application

Scoring

- Scoring sheet
 - Match
 - Not required
 - Cost effectiveness
 - Transferable results
 - Staff qualifications
 - Past projects
 - Provisions for long-term maintenance
 - Significant PWS deficiencies

Quality Applications

- Clear & detailed scope of work and deliverables
- Budget breakdown by task
- Quotes/estimates
- Pictures, maps, etc.
- Letters of support or commitment
 - ▣ Demonstrated understanding of project
 - ▣ Participation in an advisory board or steering group
 - ▣ Good faith effort for implementation
 - ▣ Show support from local planning or select board
- Include details about QAPP if applicable

Applications for 2017 grant

- Deadline: November 1, 2016
- Mail or E-mail to
 - Amy Hudnor
 - NHDES-DWGB
 - PO Box 95
 - Concord, NH 03302-0095
 - amy.hudnor@des.nh.gov
- Only one copy of application is required
- Can e-mail instead
- **http://des.nh.gov/organization/divisions/water/dwgb/dwspp/lswp_grants.htm** to download application starting mid June

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